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| 09/857,176      | 06/18/2001  | Alfred Plammer       | 100568-00004        | 7176             |

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EXAMINER

SHIPSIDES, GEOFFREY P

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/857,176

Applicant(s)

PLAMMER, ALFRED

Examiner

Geoffrey P. Shippides

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 8-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 2 and 7 is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, drawn to a process for producing plastic panels.

Group II, claim(s) 8-16, drawn to an apparatus for producing plastic panels.

Group III, claim(s) 17 and 18, drawn to a plastic panel.

2. The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Evidence of a lack of unity between the groups is found in U.S. Patent No. 3,758,657 (Menzin et al.) and U.S. Patent No. 5,702,797 (Sakakibara et al.), which are found to disclose the features of claim 8. The special technical feature is an apparatus with an extruder that passes material through a roll nip (Sakakibara et al.) and the use of a roll with mold/demolding strips which can be moved for the non-destructive release of a formed undercut (Menzin et al.). As such, the special technical features of the claimed invention are not found to define a contribution over the prior art. Menzin et al. further teaches the produced product of claims 17-18 of a plastic panel with integrally provided undercut attachments which shows that the product is known and thus also does not contribute to the prior art.

3. During a telephone conversation with Mr. Murray on 11-15-01 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-7.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 8-18 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation of "plastic panels", and the claim also recites "preferably from thermoplastic material" which is the narrower statement of the range/limitation.

6. Claims 2 and 7 are rejected under 35 U.S.C. 112, fourth paragraph, and are also objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to

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further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 2 is dependent upon instant claim 1. Claim 1 states that the molding/demolding strips are moved radially outward, which is the same limitation as is recited in instant claim 2.

Claim 7 seems to teach a second embodiment of the present invention where the material is not extruded and not passed through a roll nip. As it seems that instant claim 7 is not intended to include all of the limitations of instant claim 1 (of which it is dependent upon), it is the examiner's position that claim 7 is in improper form and should be put into independent form with only the intended limitations present.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,758,657 (Menzin et al.) in view of U.S. Patent No. 5,702,797 (Sakakibara et al.) and U.S. Patent No. 1,698,925 (Stickney).

Menzin et al. teaches a process for producing plastic panels (Abstract, line 1), which are provided on at least one side with undercut attachments formed integrally with them (Figures 8-12), the plastic being shaped by extruding (Figure 2) and shaped

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by a roll being provided with molds (Figures 4 and 8) which correspond to the undercut attachments and are filled with polymer (Figures 7-11), wherein the molds are provided with molding/demolding strips which are arranged over the circumference of the one roll (Figures 7, 10, and 11), and once the attachments have formed, the strips are radially moved for the nondestructive release of the formed undercut attachments of the plastic panel (Figures 10 and 11; Column 5, lines 35-54).

With regard to claims 1 and 2, Menzin et al. does not specifically teach the extrusion of material through a roll nip formed by two rolls. Sakakibara et al., however, teaches the production of a similar plastic panel and teaches the use of a roll nip formed by two rolls (Figure 5) as an alternative to the basic molding process using one roll (Figure 2) with is substantially the same process as taught by Menzin et al. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the process of Menzin et al. to use a process of passing extruded material through a two-roll roll nip as taught by Sakakibara et al. in order to more accurately control the shape of the bottom surface of the plastic panel.

Menzin et al. also does not specifically teach the **outward** radial movement of the strips. Menzin et al. does teach for the outward and inward radial movement of the strips (Column 5, lines 47-50), but teaches the inward movement for the nondestructive release of the formed undercut attachments. It is, however, noted that in the process of Menzin et al. that in is only important that the strip parts 29 move upward with respect to strip parts 30 in order to nondestructively release the undercuts (See figures 10 and 11). Stickney teaches the use of a radially outward moving mold parts that help to eject

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molded material (molded between a two-roll roll nip) from the rolls (Figure 3). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the process of Menzin et al. to have strip parts 29 move radially outward (and hence upward with respect to strip parts 30) in order to not only allow for the nondestructive removal of the formed undercuts as taught by Menzin et al. but to allow help to eject the molded material away from the rolls as taught by Stickney.

It is noted that instant claim 1 recites that the plastic panels are "preferably from thermoplastic material," but this claim language does not limit the claim to the use of thermoplastic material as the plastic panel forming material, but only suggests that thermoplastic material may be used.

With regard to claim 3, Menzin et al. teaches the movement of the strips back to a molding position after the nondestructive release of the undercuts in order to allow for the subsequent molding operation (Column 2, lines 20-35). It is also noted that Stickney teaches the movement of the ejectors back into their starting position after the material is released from the roll surface (Figure 3).

With regard to claim 4, Menzin et al. teaches about half and half molding and demolding strips (Figures 10 and 11).

With regard to claim 5, the plastic panel of Menzin et al. is intrinsically extruded in one or more layers.

With regard to claim 6, Menzin et al. does not specifically teach that the plastic panel is coextruded with substrates. Sakakibara et al., however, teaches the coextrusion of a substrate into the extruded material (Figure 5) in the production of a

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plastic panel. It would have been obvious to one having ordinary skill in the art at the time of invention to also include a substrate as taught by Sakakibara et al. by coextrusion as taught by Sakakibara et al. into the plastic panel of Menzin et al. in order to form a reinforced plastic panel in a method where the undercuts are nondestructively released from the molding surface.

With regard to claim 7, Menzin et al. teaches a process where the molding/demolding strips are provide movably on a substantially planer surface of a temperature controlled plate and interact with a corresponding counter surface, the polymer being arranged and melted between the plate and the counter surface (Fig. 2).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 4,725,221 (Blanz), U.S. Patent No. 3,590,109 (Doleman et al.), U.S. Patent No. 3,752,619 (Menzin et al.), U.S. Patent No. 3,507,010 (Doleman et al.), U.S. Patent No. 5,690,875 (Sakakibara et al.), U.S. Patent No. 4,362,687 (Olschewski et al.), U.S. Patent No. 4,383,670 (Olschewski et al.), U.S. Patent No. 6,162,040 (Clune), and U.S. Patent No. 6,187,247 B1 (Buzzell et al.) are cited as art of interest to show the current state of the art at the time of invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey P. Shipsides whose telephone number is 703-306-0311. The examiner can normally be reached on Monday - Friday 9 AM till 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D Crispino can be reached on 703-308-3853. The fax phone



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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Geoffrey P. Shipsides/gps  
June 23, 2003



MARK EASHOO, PH.D  
PRIMARY EXAMINER

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23/Jun/03